

What is claimed is:

1. A thermoconductive curable liquid polymer composition comprising:
 - (A) a curable liquid polymer;
 - 10 (B) a filler made from a thermally-elongatable shape memory alloy, and
 - (C) a thermoconductive filler, with the proviso that component (C) differs from component (B).

5 2. The thermoconductive curable liquid polymer composition of claim 1, where component (B) has a coil shape.

3. The thermoconductive curable liquid polymer composition of claim 1, where component (B) comprises a Cu-Zn-Al type memory alloy filler, and component (C) comprises an alumina.

10 4. The thermoconductive curable liquid polymer composition of Claim 1, wherein said component (A) is a curable liquid epoxy resin.

5. The thermoconductive curable liquid polymer composition of claim 1, where component (A) comprises a curable liquid silicone.

6. The thermoconductive curable liquid polymer composition of claim 5, where the

15 curable liquid silicone is a liquid silicone composition curable by means of an addition reaction.

7. The thermoconductive curable liquid polymer composition of claim 6, where component (A) comprises:

20 (a) 100 parts by weight of a liquid organopolysiloxane having at least two alkenyl groups per molecule;

 (b) 0.001 to 100 parts by weight of a liquid organopolysiloxane having at least two silicon-bonded hydrogen atoms per molecule; and

 (c) a hydrosilylation reaction metal catalyst, which in terms of weight units contains metal atoms in an amount of 0.01 to 1,000 ppm based on the weight of

25 the composition.

8. The thermoconductive curable liquid polymer composition of claim 1, where the component (A) is present in an amount of 2.0 to 70 wt%, the component (B) is present in an amount of 0.01 to 30 wt%, and the component (C) is present in an amount of 30 to 98 wt% in the composition of the invention.

30 9. The thermoconductive curable liquid polymer composition of claim 1, where the component (A) is present in an amount of 5.0 to 50 wt%, the component (B) is present in an amount of 0.1 to 20 wt%, and the component (C) is present in an amount of 50 to 95 wt% in the composition of the invention.

10. Use of the thermoconductive curable liquid polymer composition of claim 1 as an

35 adhesive agent or a coating agent for a semiconductor device.

5 11. Use of the thermoconductive curable liquid polymer composition of claim 2 as
an adhesive agent or a coating agent for a semiconductor device.

12. Use of the thermoconductive curable liquid polymer composition of claim 3 as
an adhesive agent or a coating agent for a semiconductor device.

13. Use of the thermoconductive curable liquid polymer composition of claim 4 as
10 an adhesive agent or a coating agent for a semiconductor device.

14. Use of the thermoconductive curable liquid polymer composition of claim 5 as
an adhesive agent or a coating agent for a semiconductor device.

15. Use of the thermoconductive curable liquid polymer composition of claim 6 as
an adhesive agent or a coating agent for a semiconductor device.

16. Use of the thermoconductive curable liquid polymer composition of claim 7 as
15 an adhesive agent or a coating agent for a semiconductor device.

17. Use of the thermoconductive curable liquid polymer composition of claim 8 as
an adhesive agent or a coating agent for a semiconductor device.

18. Use of the thermoconductive curable liquid polymer composition of claim 9 as
20 an adhesive agent or a coating agent for a semiconductor device.

19. A semiconductor device having a semiconductor element glued or coated with
the thermoconductive curable liquid polymer composition as claimed in claim 1.

20. A semiconductor device having a semiconductor element glued or coated with
the thermoconductive curable liquid polymer composition as claimed in claim 2.

25 21. A semiconductor device having a semiconductor element glued or coated with
the thermoconductive curable liquid polymer composition as claimed in claim 3.

22. A semiconductor device having a semiconductor element glued or coated with
the thermoconductive curable liquid polymer composition as claimed in claim 4.

23. A semiconductor device having a semiconductor element glued or coated with
30 the thermoconductive curable liquid polymer composition as claimed in claim 5.

24. A semiconductor device having a semiconductor element glued or coated with
the thermoconductive curable liquid polymer composition as claimed in claim 6.

25. A semiconductor device having a semiconductor element glued or coated with
the thermoconductive curable liquid polymer composition as claimed in claim 7.

35 26. A semiconductor device having a semiconductor element glued or coated with
the thermoconductive curable liquid polymer composition as claimed in claim 8.

5 27. A semiconductor device having a semiconductor element glued or coated with
the thermoconductive curable liquid polymer composition as claimed in claim 9.